

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P573251

Luminaire Tested: **ARCH-S-PA2-50-750-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573251  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-750-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5964 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

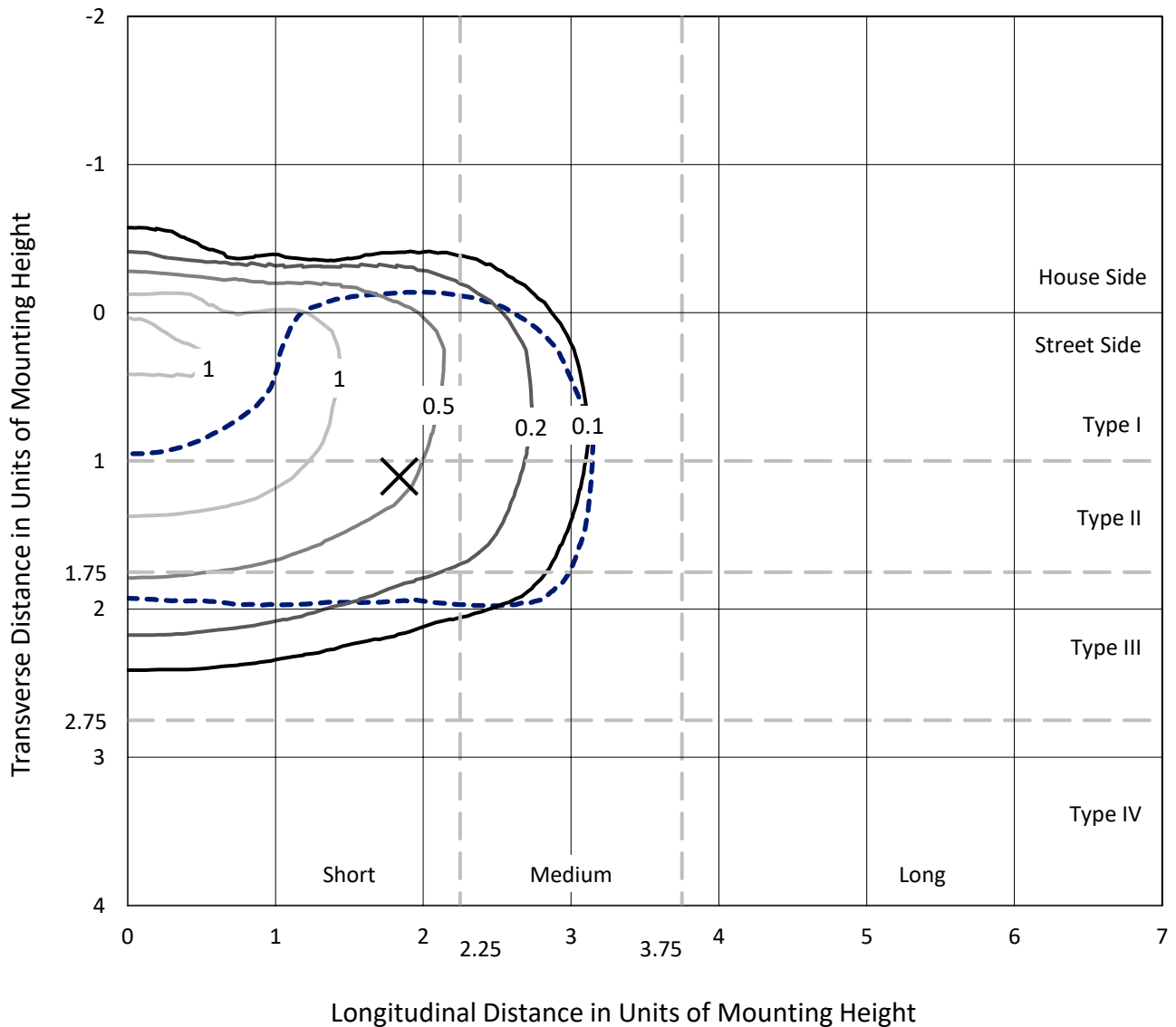
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

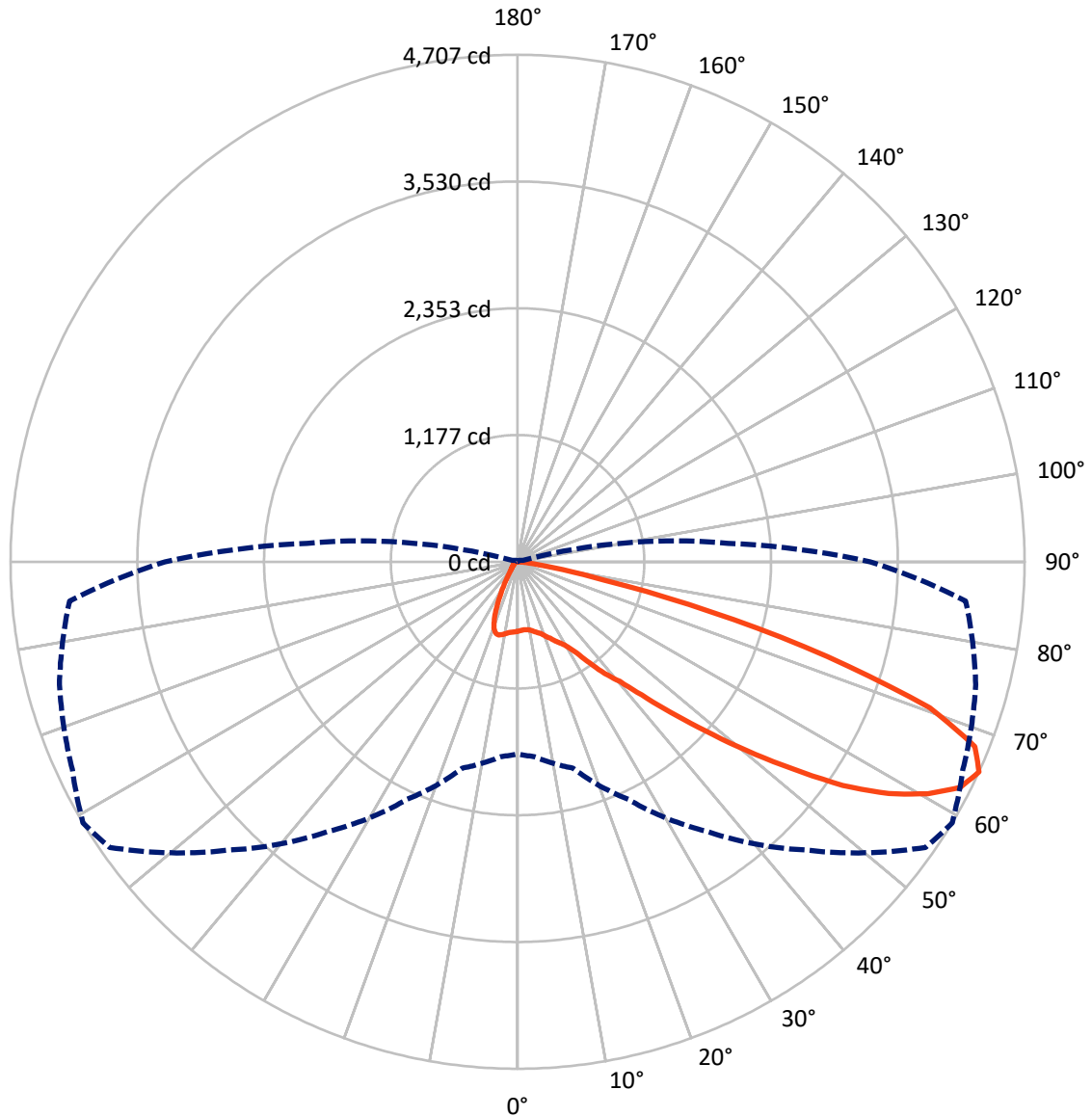
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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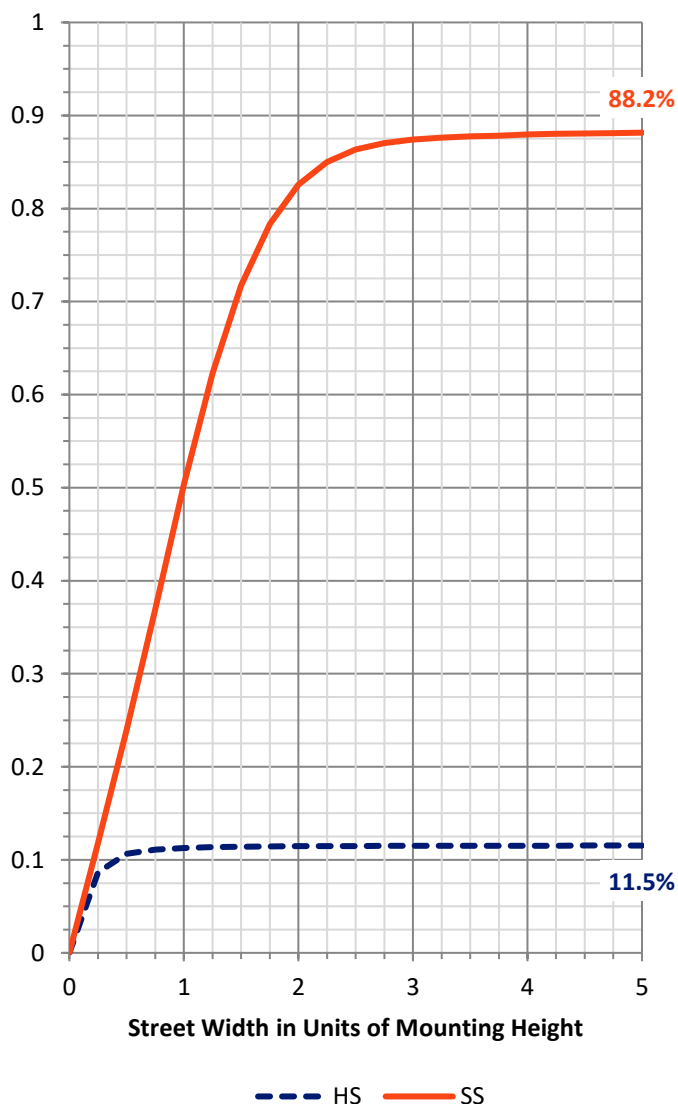
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	695.8	0.0	695.8
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	5268.2	0.0	5268.2
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	5964.0	0.0	5964.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.9	1.0
10°-20°	173.0	2.9
20°-30°	293.9	4.9
30°-40°	520.5	8.7
40°-50°	981.9	16.5
50°-60°	1661.4	27.9
60°-70°	1727.3	29.0
70°-80°	518.0	8.7
80°-90°	27.2	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5964.0	100.0
0°-180°	5964.0	100.0

**Coefficient of Utilization**



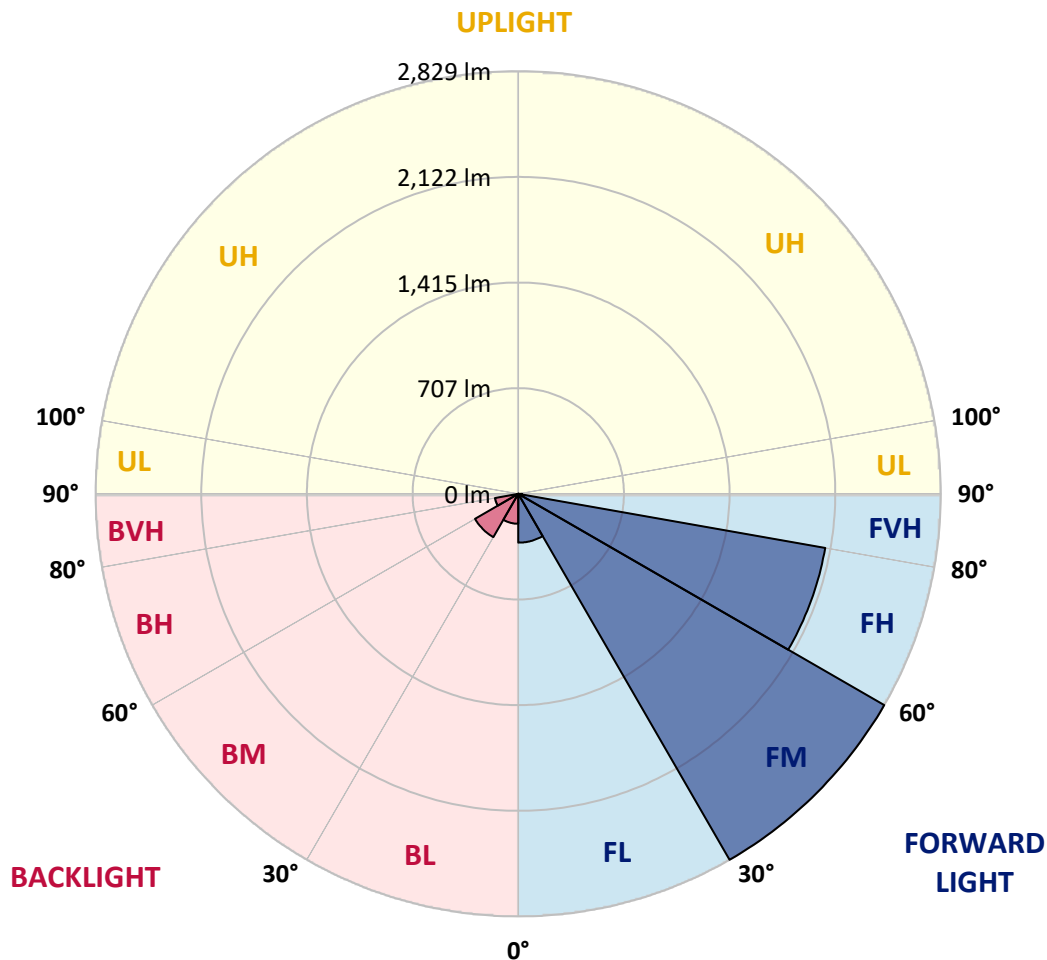
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	327.1	5.5			
FM	(30°-60°)	2829.3	47.4			
FH	(60°-80°)	2087.0	35.0			G2/5000
FVH	(80°-90°)	24.9	0.4			G1/100
BL	(0°-30°)	200.7	3.4	B1/500		
BM	(30°-60°)	334.5	5.6	B1/1000		
BH	(60°-80°)	158.3	2.7	B1/500		G1/500
BVH	(80°-90°)	2.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	627.1	624.9	624.9	629.3	631.4	633.6	638.0	638.0	638.0	642.3	644.5
5°	596.7	596.7	598.9	603.2	611.9	618.4	631.4	633.6	635.8	646.6	651.0
7.5°	577.2	577.2	579.4	588.1	598.9	614.1	631.4	635.8	642.3	657.5	668.3
10°	575.0	572.9	577.2	585.9	598.9	618.4	638.0	644.5	657.5	677.0	692.2
12.5°	581.5	579.4	583.7	592.4	605.4	624.9	651.0	661.8	677.0	703.1	724.8
15°	585.9	583.7	588.1	598.9	614.1	638.0	668.3	681.4	700.9	737.8	759.5
17.5°	598.9	596.7	598.9	607.6	622.8	648.8	687.9	700.9	733.4	774.7	798.5
20°	657.5	655.3	642.3	638.0	640.1	664.0	713.9	735.6	774.7	826.7	844.1
22.5°	779.0	770.3	746.5	707.4	681.4	690.0	746.5	770.3	822.4	881.0	894.0
25°	941.7	935.2	900.5	833.3	759.5	737.8	783.3	815.9	878.8	943.9	939.6
27.5°	1126.2	1113.2	1080.6	987.3	887.5	815.9	828.9	857.1	926.6	996.0	974.3
30°	1286.8	1282.4	1245.5	1167.4	1050.2	943.9	898.4	913.5	976.5	1050.2	1024.2
32.5°	1434.3	1421.3	1390.9	1317.1	1208.7	1100.2	1009.0	1009.0	1061.1	1147.9	1108.8
35°	1597.1	1588.4	1551.5	1477.7	1373.6	1245.5	1163.1	1154.4	1197.8	1295.4	1210.8
37.5°	1764.2	1742.5	1725.1	1649.1	1545.0	1434.3	1334.5	1315.0	1336.7	1408.3	1304.1
40°	1972.5	1972.5	1933.4	1864.0	1766.3	1649.1	1510.3	1460.4	1453.9	1547.2	1466.9
42.5°	2215.5	2209.0	2176.4	2111.3	2018.0	1909.5	1733.8	1688.2	1683.9	1796.7	1701.2
45°	2495.4	2491.1	2452.0	2397.8	2332.7	2213.3	2039.7	1994.2	1968.1	2098.3	1985.5
47.5°	2751.5	2736.3	2723.3	2729.8	2692.9	2558.3	2395.6	2341.4	2339.2	2441.2	2295.8
50°	2927.2	2918.6	2964.1	3007.5	3077.0	2992.3	2799.2	2751.5	2714.6	2849.1	2619.1
52.5°	3042.2	3037.9	3129.0	3252.7	3395.9	3389.4	3218.0	3189.8	3159.4	3196.3	2907.7
55°	3087.8	3087.8	3196.3	3424.2	3675.9	3784.4	3704.1	3665.0	3558.7	3482.7	3224.5
57.5°	3033.6	3027.1	3168.1	3465.4	3849.5	4073.0	4107.7	4062.1	3895.0	3810.4	3576.0
60°	2803.6	2807.9	2975.0	3350.4	3836.4	4190.1	4413.6	4372.4	4205.3	4079.5	3871.2
62.5°	2373.9	2410.8	2586.6	2994.5	3558.7	4096.8	4589.4	4611.1	4431.0	4274.8	4133.7
65°	1783.7	1816.2	1983.3	2434.7	3053.1	3784.4	4622.0	4706.6	4561.2	4402.8	4174.9
67.5°	1085.0	1095.8	1299.8	1640.5	2248.0	3152.9	4394.1	4578.6	4474.4	4214.0	3767.0
70°	505.6	533.8	633.6	896.2	1423.5	2321.8	3797.4	4057.8	3940.6	3617.3	2864.3
72.5°	197.5	206.1	269.1	414.5	755.1	1460.4	2833.9	3007.5	2927.2	2569.2	1707.7
75°	97.6	104.2	130.2	197.5	345.0	603.2	1731.6	1844.4	1712.1	1291.1	722.6
77.5°	71.6	71.6	86.8	121.5	188.8	223.5	729.1	818.1	772.5	499.1	197.5
80°	47.7	52.1	60.8	82.5	119.3	108.5	275.6	327.7	273.4	154.1	69.4
82.5°	28.2	30.4	45.6	58.6	80.3	62.9	93.3	104.2	112.8	75.9	32.5
85°	15.2	15.2	30.4	43.4	43.4	28.2	32.5	36.9	43.4	45.6	17.4
87.5°	4.3	4.3	19.5	26.0	17.4	15.2	17.4	17.4	19.5	23.9	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	646.6	646.6	648.8	648.8	651.0	651.0	651.0	651.0	653.1	655.3	655.3
5°	653.1	655.3	655.3	655.3	655.3	651.0	648.8	646.6	646.6	648.8	648.8
7.5°	670.5	672.7	670.5	666.2	659.7	651.0	642.3	642.3	640.1	642.3	640.1
10°	696.5	696.5	694.4	683.5	672.7	655.3	638.0	624.9	616.3	614.1	609.8
12.5°	729.1	729.1	722.6	703.1	683.5	651.0	605.4	562.0	527.3	512.1	507.8
15°	761.6	761.6	753.0	724.8	685.7	607.6	512.1	421.0	368.9	347.2	334.2
17.5°	800.7	796.4	781.2	742.1	661.8	520.8	366.7	273.4	232.2	212.7	212.7
20°	841.9	837.6	809.4	744.3	601.1	373.2	238.7	188.8	177.9	173.6	173.6
22.5°	887.5	876.7	833.3	726.9	473.0	253.9	180.1	167.1	162.7	160.6	160.6
25°	924.4	907.0	850.6	679.2	338.5	177.9	158.4	154.1	145.4	143.2	138.9
27.5°	952.6	926.6	857.1	577.2	223.5	147.6	141.0	132.4	123.7	115.0	115.0
30°	989.5	956.9	861.5	449.2	151.9	128.0	121.5	110.7	99.8	91.1	91.1
32.5°	1063.3	1015.5	863.6	314.6	125.9	112.8	99.8	86.8	75.9	71.6	69.4
35°	1143.6	1078.5	839.8	204.0	110.7	95.5	80.3	69.4	58.6	56.4	56.4
37.5°	1232.5	1171.8	787.7	138.9	97.6	80.3	65.1	54.2	47.7	45.6	45.6
40°	1382.2	1310.6	700.9	110.7	84.6	67.3	54.2	45.6	41.2	39.1	39.1
42.5°	1597.1	1473.4	592.4	95.5	73.8	56.4	43.4	36.9	34.7	32.5	32.5
45°	1844.4	1655.7	466.5	86.8	65.1	47.7	36.9	32.5	30.4	28.2	28.2
47.5°	2128.7	1844.4	368.9	75.9	56.4	41.2	32.5	28.2	26.0	23.9	23.9
50°	2397.8	1992.0	277.8	67.3	49.9	34.7	28.2	26.0	23.9	21.7	21.7
52.5°	2619.1	2091.8	210.5	58.6	43.4	30.4	26.0	23.9	19.5	19.5	19.5
55°	2886.0	2169.9	160.6	52.1	39.1	28.2	23.9	19.5	17.4	15.2	15.2
57.5°	3118.2	2198.1	117.2	45.6	34.7	26.0	21.7	17.4	13.0	10.8	10.8
60°	3274.4	2174.3	84.6	39.1	30.4	21.7	17.4	13.0	8.7	6.5	6.5
62.5°	3385.1	2122.2	65.1	34.7	26.0	19.5	15.2	10.8	6.5	4.3	4.3
65°	3274.4	1961.6	52.1	30.4	21.7	17.4	10.8	8.7	4.3	2.2	2.2
67.5°	2831.8	1644.8	41.2	26.0	19.5	15.2	10.8	6.5	2.2	0.0	0.0
70°	2035.4	1173.9	34.7	23.9	17.4	13.0	8.7	4.3	2.2	0.0	0.0
72.5°	1134.9	605.4	32.5	21.7	17.4	13.0	8.7	4.3	2.2	0.0	0.0
75°	460.0	208.3	30.4	21.7	17.4	10.8	8.7	4.3	2.2	0.0	0.0
77.5°	134.5	71.6	26.0	19.5	17.4	13.0	8.7	4.3	2.2	0.0	0.0
80°	47.7	32.5	19.5	17.4	13.0	10.8	8.7	6.5	2.2	0.0	0.0
82.5°	21.7	13.0	8.7	6.5	6.5	6.5	6.5	4.3	2.2	0.0	0.0
85°	8.7	6.5	4.3	2.2	2.2	2.2	2.2	2.2	2.2	0.0	0.0
87.5°	6.5	4.3	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)